CLAIMS

1. A bending apparatus which moves one of upper and lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables, comprising:

tool-layout information determination device for automatically or manually determining tool-layout information based on product information;

tool housing device for housing a tool group including a plurality of split tools;

tool exchanging device for exchanging tool groups between said tool housing device, and said upper and lower tables; and

process-station formation device for splitting a tool group transferred from said tool housing device to said upper and lower tables through said tool exchanging device into a plurality of tool groups based on said tool-layout information from said tool-layout information determination device, thereby forming a plurality of process stations.

2. The bending apparatus according to claim 1, wherein all of said plurality of split tools have the same length.

3. The bending apparatus according to claim 2, wherein all of said plurality of split tools have a length of 5 mm.

4. The bending apparatus according to claim 1, wherein said process-station formation device comprises a separator, and said separator is movable rightward, leftward, frontward, backward, upward and downward.

5. The bending apparatus according to claim 4, wherein said separator has an arm which is rotatably mounted on an abutment of a back gauge.

6. The bending apparatus according to claim 1, wherein said process-station formation device comprises a fork-like separator, and said Fork-like separator has a pair of taper claws.

7. A bending method in a bending apparatus which moves one of upper and lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables,

forming a process station by isometric split tools based on automatically or manually determined tool-layout information, and then performing bending.

8. A bending method in a bending apparatus which moves one of upper and lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables,

forming a plurality of process station by transferring a tool group which comprises a plurality of split tools to upper and lower tables, splitting said transferred tool group into a plurality of tool groups based on automatically or manually determined tool-layout information, and then performing bending.

9. The bending method according to claim 8, wherein all of said plurality of split tools have the same length.

10. The bending method according to claim 9, wherein all of said plurality of split tools have a length of 5 mm.

11. A bending tool in a bending apparatus which moves one of upper and lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables,

provided with a groove with which tool moving and positioning device for moving and positioning the bending tool in a longitudinal direction of said upper and lower tables can be engaged.

12. The bending tool according to claim 11, wherein said groove is tapered so that a tapered member of said tool moving and positioning device can be freely engaged therewith.

13. The bending tool according to claim 11 or 12, wherein said groove is formed on a back face of the bending tool.